

DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATION

As the below-named inventors, we hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled MCH4 AND MCH5, APOPTOTIC PROTEASES, NUCLEIC ACIDS ENCODING AND METHODS OF USE, the specification of which was filed on June 14, 1996 (Attorney Docket No. P-ID 2165), as Application Serial No. 08/665,220.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment(s) referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Sec. 1.56(a).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are

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Page 2

punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

We hereby appoint the following attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

CATHRYN CAMPBELL, Registration No. 31,815; CHRISTINE BELLAS, Registration No. 34,122; SUSAN M. PERKINS, Registration No. 36,405; RICHARD J. IMBRA, Registration No. 37,643; PAUL C. STEINHARDT, Registration No. 30,806; GREGORY R. HOOK, Registration No. 38,701; DAVID SPOLTER, Registration No. 36,933; DAVID A. GAY, Registration No. 39,200; BARRY S. WILSON, Registration No. 39,431; GREGORY P. EINHORN, Registration No. 38,440; CALVIN A. FAN, Registration No. 38,444; JANE E.R. POTTER, Registration No. 33,332; and DAVID R. PRESTON, Registration No. 38,710. Direct all telephone calls to Cathryn Campbell at telephone no. (619) 535-9001.

Address all correspondence to:

CATHRYN CAMPBELL  
Campbell and Flores  
4370 La Jolla Village Drive  
Suite 700  
San Diego, California 92122

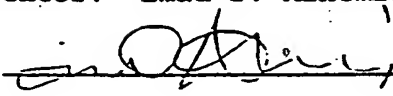
Alnemri et al.

Serial No.: 08/665,220

Filed: June 14, 1996

Page 3

Full name of first inventor: Emad S. Alnemri

Inventor's signature: 

Date: 9/3/96

Residence: Ambler, Pennsylvania

Citizenship: Hashemite Kingdom of the Jordan

Post Office Address: 805 Meetinghouse Road  
Ambler, Pennsylvania 19002

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Serial No.: 08/665,220

Filed: June 14, 1996

Page 4

Full name of second inventor: Teresa Fernandes-Alnemri

Inventor's signature: Teresa Fernandes-Alnemri

Date: 9/3/96

Residence: Ambler, Pennsylvania

Citizenship: United States of America

Post Office Address: 805 Meetinghouse Road  
Ambler, Pennsylvania 19002

Alnemri et al.

Serial No.: 08/665,220

Filed: June 14, 1996

Page 5

Full name of third inventor: Gerald Litwack

Inventor's signature: 

Date: 9/3/96

Residence: Wynnewood, Pennsylvania

Citizenship: United States of America

Post Office Address: 380 Montgomery Avenue  
Wynnewood, Pennsylvania 19096

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Serial No.: 08/665,220

Filed: June 14, 1996

Page 6

Full name of fourth inventor: Robert Armstrong

Inventor's signature: Robert Armstrong

Date: 11-4-96

Residence: San Diego, California

Citizenship: United States of America

Post Office Address: 5663 Scripps Street  
San Diego, CA 92122

Alnemri et al.

Serial No.: 08/665,220

Filed: June 14, 1996

Page 7

Full name of fifth inventor: Kevin Tomaselli

Inventor's signature: *K. Tomaselli*

Date: 6/14/96

Residence: La Jolla, California

Citizenship: United States of America

Post Office Address: 539 Westbourne Street  
La Jolla, CA 92037

## PATENT

I hereby certify that on the date specified below, this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to Assistant Commissioner for Patents, 2011 Jefferson Davis Highway, Washington, DC 20231.

3/31/98  
Date

Stephen J. Rosenman  
Stephen J. Rosenman

## THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Emad S. Alnemri et al.  
Application No. : 08/882,429  
Filed : June 25, 1997  
For : MCH4 AND MCH5, APOPTOTIC PROTEASES, NUCLEIC  
ACIDS ENCODING AND METHODS OF USE  
Examiner : B. Sisson  
Art Unit : 1807  
Docket No. : 480140.424C2  
Date : March 25, 1998

Assistant Commissioner for Patents  
2011 Jefferson Davis Highway  
Washington, DC 20231

REVOCATION AND SUBSTITUTE POWER OF ATTORNEY

Sir:

In the matter of the above-identified application, I, Abram Goldfinger, declare that I am the Director, Office of Technology Transfer, of Thomas Jefferson University, the assignee. Documentary evidence of chain of title from the original owners to Thomas Jefferson University has been filed with and recorded by the United States Patent Office at Reel 8249, Frame 0880. The evidentiary documents referred to in the instant Revocation and Power of Attorney have been reviewed by the undersigned; and it is certified that, to the best of Thomas Jefferson University's knowledge and belief, title is in Thomas Jefferson University. I hereby revoke all power of attorney heretofore given and hereby appoint RICHARD W. SEED, Registration No. 16,557; ROBERT J. BAYNHAM, Registration No. 22,846; EDWARD W. BULCHIS, Registration No. 26,847; GEORGE C. RONDEAU, JR., Registration No. 28,893; DAVID H. DEITS, Registration No. 28,066; WILLIAM O. FERRON, JR., Registration No. 30,633; PAUL T. MEIKLEJOHN, Registration No. 26,569; DAVID J. MAKI, Registration No. 31,392; RICHARD G. SHARKEY, Registration No. 32,629; DAVID V. CARLSON, Registration No. 31,153; MAURICE J. PIRIO, Registration




No. 33,273; KARL R. HERMANN, Registration No. 33,507; DAVID D. McMASTERS, Registration No. 33,963; ROBERT IANNUCCI, Registration No. 33,514; MICHAEL J. DONOHUE, Registration No. 35,859; CHRISTOPHER J. DALEY-WATSON, Registration No. 34,807; STEVEN D. LAWRENZ, Registration No. 37,376; ROBERT G. WOOLSTON, Registration No. 37,263; ELLEN M. BIERMAN, Registration No. 38,079; BRYAN A. SANTARELLI, Registration No. 37,560; CAROL NOTTENBURG, Registration No. 39,317; CRAIG S. JEPSON, Registration No. 33,517; PAUL T. PARKER, Registration No. 38,264; JOHN C. STEWART, Registration No. 40,188; ROBERT W. BERGSTROM, Registration No. 39,906; DAVID W. PARKER, Registration No. 37,414; ROBERT E. MATES, Registration No. 35,271; BRIAN G. BODINE, Registration No. 40,520; FRANK ABRAMONTE, Registration No. 38,066; E. RUSSELL TARLETON, Registration No. 31,800; FREDERICK M. FLIEGEL, Registration No. 36,138; JAN C. L. MAXWELL, Registration No. 41,181; THOMAS L. EWING, Registration No. 34,328; CLIFTON G. GREEN, Registration No. 41,044; PHILLIP B. C. JONES, Registration No. 38,195; KEVIN S. COSTANZA, Registration No. 37,801; DALE C. BARR, Registration No. 40,498; KEVIN S. ROSS, Registration No. P-42,116; PAUL F. RUSYN, Registration No. P-42,118; JOHN M. WECHKIN, Registration No. P-42,216; THOMAS E. LOOP, Registration No. P-42,810; STEPHEN J. ROSENMAN, Registration No. P-43,058; and BRIAN L. JOHNSON, Registration No. 40,033, comprising the firm of SEED AND BERRY LLP, 6300 Columbia Center, Seattle, Washington 98104-7092, as the principal attorneys with full power of substitution, association, and revocation to prosecute said application, to transact all business in the Patent and Trademark Office connected therewith, and to receive the letters patent therefor. Please direct all future correspondence to:

Stephen J. Rosenman  
SEED and BERRY LLP  
6300 Columbia Center  
701 Fifth Avenue  
Seattle, Washington 98104-7092

and direct all telephone calls to Stephen J. Rosenman at (206) 622-4900 and telecopies to (206) 682-6031.

Thomas Jefferson University

3/26/98  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Abram Goldfinger  
Director, Office of Technology Transfer

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MAY 02 1997  
CAMPBELL & FLORES



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APRIL 25, 1997

PTAS

CAMPBELL & FLORES LLP  
DAVID A. GAY  
4370 LA JOLLA VILLAGE DRIVE, SUITE 700  
SAN DIEGO, CA 92122



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NOTICE

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231.

RECORDATION DATE: 11/07/1996

REEL/FRAME: 8249/0880  
NUMBER OF PAGES: 6

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

ALNEMRI, EMAD S.

DOC DATE: 09/03/1996

ASSIGNOR:

FERNANDES-ALNEMRI, TERESA

DOC DATE: 09/03/1996

ASSIGNOR:

LITWACK, GERALD

DOC DATE: 09/03/1996

ASSIGNEE:

THOMAS JEFFERSON UNIVERSITY  
1020 LOCUST STREET  
PHILADELPHIA, PENNSYLVANIA 19107

SERIAL NUMBER: 08665220

PATENT NUMBER:

FILING DATE: 06/14/1996

ISSUE DATE:

8249/0880 PAGE 2

LENELL MACKALL, PARALEGAL  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

MAR-25-98 WED 14:18

SEED &amp; BERRY

FAX NO. 2066026031

P. 04

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## PATENT

I hereby certify that on the date specified below, this correspondence is being sent via facsimile to Examiner Bradley L. Sisson, Art Unit 1807.

3/27/98

Date

  
Stephen J. Rosenman

## THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Emad S. Alnemri et al.  
Application No. : 08/882,429  
Filed : June 25, 1997  
For : MCH4 AND MCH5, APOPTOTIC PROTEASE, NUCLEIC  
ACIDS ENCODING AND METHODS OF USE

Examiner : B. Sisson  
Art Unit : 1807  
Docket No. : 480140.424C2  
Date : March 25, 1998

Assistant Commissioner for Patents  
2011 Jefferson Davis Highway  
Washington, DC 20231

REVOCATION AND SUBSTITUTE POWER OF ATTORNEY

Sir:

In the matter of the above-identified application, I, Kevin J. Tomaselli, Ph.D., declare that I am the Vice President of Science and Technology of IDUN Pharmaceuticals, Inc., the assignee. Documentary evidence of chain of title from the original owners to IDUN Pharmaceuticals, Inc. has been filed with and recorded by the United States Patent Office at Reel 8249, Frame 0888. The evidentiary documents referred to in the instant Revocation and Power of Attorney have been reviewed by the undersigned; and it is certified that, to the best of IDUN Pharmaceuticals, Inc.'s knowledge and belief, title is in IDUN Pharmaceuticals, Inc.. I hereby revoke all power of attorney heretofore given and hereby appoint RICHARD W. SEED, Registration No. 16,557; ROBERT J. BAYNHAM, Registration No. 22,846; EDWARD W. BULCHIS, Registration No. 26,847; GEORGE C. RONDEAU, JR., Registration No. 28,893; DAVID H. DEITS, Registration No. 28,066; WILLIAM O. FERRON, JR., Registration No. 30,633; PAUL T. MEIKLEJOHN, Registration No. 26,569; DAVID J. MAKI, Registration No. 31,392; RICHARD G. SHARKEY, Registration No. 32,629; DAVID V. CARLSON, Registration No. 31,153; MAURICE J. PIRIO, Registration No. 33,273; KARL R. HERMANN, Registration No. 33,507; DAVID D. McMASTERS,

Registration No. 33,963; ROBERT IANNUCCI, Registration No. 33,514; MICHAEL J. DONOHUE, Registration No. 35,859; CHRISTOPHER J. DALEY-WATSON, Registration No. 34,807; STEVEN D. LAWRENZ, Registration No. 37,376; ROBERT G. WOOLSTON, Registration No. 37,263; ELLEN M. BIERMAN, Registration No. 38,079; BRYAN A. SANTARELLI, Registration No. 37,560; CAROL NOTTENBURG, Registration No. 39,317; CRAIG S. JEPSON, Registration No. 33,517; PAUL T. PARKER, Registration No. 38,264; JOHN C. STEWART, Registration No. 40,188; ROBERT W. BERGSTROM, Registration No. 39,906; DAVID W. PARKER, Registration No. 37,414; ROBERT F. MATES, Registration No. 35,271; BRIAN G. BODINE, Registration No. 40,520; FRANK ABRAMONTE, Registration No. 38,066; E. RUSSELL TARLETON, Registration No. 31,800; FREDERICK M. FLIEGEL, Registration No. 36,138; JAN C. L. MAXWELL, Registration No. 41,181; THOMAS L. EWING, Registration No. 34,328; CLIFTON G. GREEN, Registration No. 41,044; PHILLIP B. C. JONES, Registration No. 38,195; KEVIN S. COSTANZA, Registration No. 37,801; DALE C. BARR, Registration No. 40,498; KEVIN S. ROSS, Registration No. P-42,116; PAUL F. RUSYN, Registration No. P-42,118; JOHN M. WECHKIN, Registration No. P-42,216; THOMAS E. LOOP, Registration No. P-42,810; STEPHEN J. ROSENMAN, Registration No. P-43,058; and BRIAN L. JOHNSON, Registration No. 40,033, comprising the firm of SEED AND BERRY LLP, 6300 Columbia Center, Seattle, Washington 98104-7092, as the principal attorneys with full power of substitution, association, and revocation to prosecute said application, to transact all business in the Patent and Trademark Office connected therewith, and to receive the letters patent therefor. Please direct all future correspondence to:

Stephen J. Rosenman  
SEED and BERRY LLP  
6300 Columbia Center  
701 Fifth Avenue  
Seattle, Washington 98104-7092

and direct all telephone calls to Stephen J. Rosenman at (206) 622-4900 and telecopies to (206) 682-6031.

IDUN Pharmaceuticals, Inc.

Date

3/25/98

Kevin J. Tomaselli, Ph.D.

Vice President of Science and Technology



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

FEBRUARY 07, 1997

PTAS



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UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

FEB 17 1997

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231.

RECORDATION DATE: 11/07/1996

REEL/FRAME: 8249/0666  
NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

ARMSTRONG, ROBERT

DOC DATE: 11/04/1996

ASSIGNOR:

TOMASELLI, KEVIN

DOC DATE: 11/04/1996

ASSIGNEE:

IDUN PHARMACEUTICALS  
11085 NORTH TORREY PINES ROAD, SUITE 300  
LA JOLLA, CALIFORNIA 92037

SERIAL NUMBER: 08665220  
PATENT NUMBER:

FILING DATE: 06/14/1996  
ISSUE DATE:

SHIRLIE SIMON, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS



06/25/97

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
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CATHRYN CAMPBELL  
CAMPBELL & FLORES  
SUITE 700  
4370 LA JOLLA VILLAGE  
SAN DIEGO CA 92122

RECEIVED

MAY 26 1998

SEED &amp; BERRY LLP

SISSON, BRADLEY

EXAMINER

1634

ART UNIT

DISPATCH NUMBER

11

DATE MAILED:

04/06/98

This is in response to the Power of Attorney filed \_\_\_\_\_.

- ☐ 1. The Power of Attorney to you in this application has been revoked by the applicant. Future correspondence will be mailed to the new address of record. 37 CFR 1.33.
- ☐ 2. The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record. (37 CFR 1.33).
- ☐ 3. The withdrawal as attorney in this application has been accepted. Future correspondence will be mailed to the new address of record. 37 CFR 1.33.

*Brenda Denny*  
This is a communication from the

- ☒ 4. The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the below-noted address as provided by 37 CFR 1.33.
- ☐ 5. The Power of Attorney in this application is not accepted for the reason(s) checked below:
- ☐ a. The Power of Attorney is from an assignee and the Certificate required by 37 CFR 3.73 (b) has not been received.
- ☐ b. The person signing for the assignee has omitted their empowerment to sign on behalf of the assignee.
- ☐ c. The inventor(s) is without authority to appoint attorneys since the assignee has intervened as provided by 37 CFR 3.71.
- ☐ d. The signature of \_\_\_\_\_, a co-inventor in this application, has been omitted. The Power of Attorney will be entered upon receipt of confirmation signed by said co-inventor.
- ☐ e. The person(s) appointed in the Power of Attorney is not registered to practice before the U.S. Patent & Trademark Office.
- ☐ f. The revocation is not signed by the applicant, the assignee of the entire interest, or one particular principal attorney having the authority to revoke.

STEPHEN J. ROSENMAN  
SEED AND BERRY, LLP  
6300 COLUMBIA CENTER  
701 FIFTH AVENUE  
SEATTLE WA 98104-7092

*Brenda Denny*  
This is a communication from the  
Patent and Trademark Office